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USE OF EXTRA FIRMWARE FLASH ROM SPACE AS A DIAGNOSTIC DRIVE

ABSTRACT

A method 20 and computer apparatus for using available firmware flash ROM space as a diagnostic drive. The computer apparatus has a nonvolatile random access memory, an Extensible Firmware Interface (EFI) and a basic input and output system (BIOS). To implement the functionality provided by the present invention, a command shell of the EFI is modified to include the EFI driver and operates to configure available flash space normally reserved for firmware (BIOS) as a diagnostic disk drive. The modified EFI and the EFI driver are stored in the flash memory. When the computer system 10 is initialized (booted), the EFI driver configures the available space in the flash memory that is not allocated to the firmware as the diagnostic disk drive.

Diagnostic programs are loaded into the diagnostic disk drive, which are selectively run by a user, such as by using the command shell. The method may also be configured to

include data compression and decompression routines to increase the quantity of data that may be stored in the configured disk drive space, or encryption routines for security purposes. The diagnostic disk drive space may be used to store power on self test (POST) error logs in files that may be read by the operating system during its boot

process and displayed by an event viewer.